

SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name or designation of the mixture 502 TR Wax Build Up Remover

Registration number -

Synonyms None.

Date of first issue 30-March-2011

Version number 01

Revision date -

Supersedes date -

Relevant identified uses of the substance or mixture and uses advised against

Identified uses Wax remover.

Uses advised against None known.

Details of the supplier of the safety data sheet

Supplier

Company name TR Industries
Address 11022 Vulcan Street
South Gate, CA 90280-0893
United States

Telephone: (562) 923-5438

Contact person Not available.

CHEMTREC: (800) 424-9300

CHEMTREC International 00 1-703-527-3887

Section 2: Hazards identification

Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification R10, Xn;R20/21/22, Xi;R36/38, N;R51/53

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

Flammable liquids Category 3 Flammable liquid and vapour.

Health hazards

Skin corrosion/irritation Category 2 Causes skin irritation.

Serious eye damage/eye irritation Category 2 Causes serious eye irritation.

Environmental hazards

Hazardous to the aquatic environment - long-term hazard Category 2 Toxic to aquatic life with long lasting effects.

Hazard summary

Physical hazards Flammable.

Health hazards May cause cancer. May cause heritable genetic damage. Also harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes and skin. Occupational exposure to the substance or mixture may cause adverse health effects.

Environmental hazards Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Specific hazards Not available.

Main symptoms Irritant effects. May cause central nervous system effects.

Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 1,2,4-Trimethyl benzene, Isopropyl alcohol, Morpholine, Solvent naphtha (petroleum), light aromatic



Signal word	Warning
Hazard statements	Flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Avoid release to the environment.
Response	In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash thoroughly after handling.
Storage	Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental label information	None.
Other hazards	Not assigned.

Section 3: Composition/information on ingredients

Mixture

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Solvent naphtha (petroleum), light aromatic	20 - 25	64742-95-6 265-199-0	-	649-356-00-4	#
Classification:		DSD: R10, Xn;R65, Xi;R38, R67, N;R51/53			
		CLP: Flam. Liq. 3;H226, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H335, Aquatic Chronic 2;H411			
1,2,4-Trimethyl benzene	5 - 10	95-63-6 202-436-9	-	601-043-00-3	#
Classification:		DSD: R10, Xn;R20, Xi;R36/37/38, N;R51-53			
		CLP: Flam. Liq. 3;H226, Skin Irrit. 2;H315, Eye Irrit. 2;H319, Acute Tox. 4;H332, STOT SE 3;H335, Aquatic Chronic 2;H411			
Stoddard solvent	5 - 10	8052-41-3 232-489-3	-	649-345-00-4	#
Classification:		DSD: R10, Xn;R65			
		CLP: Flam. Liq. 3;H226, Asp. Tox. 1;H304			
1,3,5-Trimethylbenzene	1 - 5	108-67-8 203-604-4	-	601-025-00-5	#
Classification:		DSD: R10, Xi;R37, N;R51-53			
		CLP: Flam. Liq. 3;H226, Asp. Tox. 1;H304, STOT SE 3;H335, Aquatic Chronic 2;H411			
Isopropyl alcohol	1 - 5	67-63-0 200-661-7	-	603-117-00-0	#
Classification:		DSD: F;R11, Xi;R36, R67			
		CLP: Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336			
Silica	1 - 5	61790-53-2 231-545-4	-	-	#
Classification:		DSD: -			
		CLP: -			

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Diethylbenzene	1 - 2	25340-17-4 246-874-9	-	-	#
Classification:		DSD: -			
		CLP: -			
Morpholine	1 - 2	110-91-8 203-815-1	-	613-028-00-9	#
Classification:		DSD: R10, C;R34, Xn;R20/21/22			
		CLP: Flam. Liq. 3;H226, Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Corr. 1B;H314, Acute Tox. 4;H332			
Oleic acid	1 - 2	112-80-1 204-007-1	-	-	#
Classification:		DSD: -			
		CLP: -			
CUMENE	0,1 - 1	98-82-8 202-704-5	-	601-024-00-X	#
Classification:		DSD: R10, Xn;R65, Xi;R37, N;R51-53			
		CLP: Flam. Liq. 3;H226, Acute Tox. 4;H302, Asp. Tox. 1;H304, STOT SE 3;H335, STOT SE 3;H336, STOT SE 2;H371, STOT RE 1;H372, Aquatic Chronic 2;H411			
Xylene	0,1 - 1	1330-20-7 215-535-7	-	601-022-00-9	#
Classification:		DSD: R10, Xn;R20/21, Xi;R38			
		CLP: Flam. Liq. 3;H226, Acute Tox. 4;H312, Skin Irrit. 2;H315, Acute Tox. 4;H332			

Composition comments Components not listed are either non-hazardous or are below reportable limits. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Section 4: First aid measures

General information Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

Description of first aid measures

Inhalation Get medical attention if symptoms persist. If symptomatic, move to fresh air.

Skin contact Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Continue rinsing. Get medical attention.

Ingestion Seek medical advice.

Most important symptoms and effects, both acute and delayed Irritant effects. Central nervous system depression.

Indication of any immediate medical attention and special treatment needed Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Section 5: Firefighting measures

General fire hazards Flammable liquid and vapour. Heat may cause the containers to explode.

Extinguishing media

Suitable extinguishing media Water. Water spray. Foam. Dry powder. Carbon dioxide (CO2).

Unsuitable extinguishing media None known.

Special hazards arising from the substance or mixture Vapors may form explosive mixtures with air. Material will float and may ignite on surface of water. Vapours are heavier than air and may travel along the floor and in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.

Advice for firefighters

Special protective equipment for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Special firefighting procedures

Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

See Section 8 for personal protective equipment.

For emergency responders

Keep unnecessary personnel away.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Should not be released into the environment. Prevent entry into waterways, sewers, basements or confined areas.

Large Spills: Cover with plastic sheet to prevent spreading. Following product recovery, flush area with water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Small Spills: Absorb spill with vermiculite or other inert material. Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste.

Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

Section 7: Handling and storage

Precautions for safe handling

Keep away from heat and sources of ignition. Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Wear personal protective equipment. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children. Keep container tightly closed in a cool, well-ventilated place.

Specific end use(s)

Wax remover.

Section 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Austria. MAK List

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	MAK	100 mg/m ³	
		20 ppm	
	STEL	30 ppm 150 mg/m ³	
1,3,5-Trimethylbenzene (108-67-8)	MAK	20 ppm	
		100 mg/m ³	
	STEL	30 ppm 150 mg/m ³	
CUMENE (98-82-8)	MAK	20 ppm	
		100 mg/m ³	
	STEL	250 mg/m ³ 20 ppm	
Isopropyl alcohol (67-63-0)	MAK	200 ppm	
		500 mg/m ³	
	STEL	800 ppm 2.000 mg/m ³	
Morpholine (110-91-8)	MAK	10 ppm	
		36 mg/m ³	
	STEL	10 ppm 36 mg/m ³	
Silica (61790-53-2)	MAK	4 mg/m ³	Inhalable fraction.
	Xylene (1330-20-7)	MAK	
		221 mg/m ³	
	STEL	100 ppm 442 mg/m ³	

Belgium. Exposure Limit Values.

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	100 mg/m ³	
1,3,5-Trimethylbenzene (108-67-8)	TWA	20 ppm 20 ppm	
CUMENE (98-82-8)	STEL	100 mg/m ³ 50 ppm	
	TWA	250 mg/m ³ 20 ppm	
Isopropyl alcohol (67-63-0)	STEL	100 mg/m ³ 1.000 mg/m ³ 400 ppm	
	TWA	200 ppm 500 mg/m ³	
Morpholine (110-91-8)	STEL	20 ppm	
	TWA	72 mg/m ³ 36 mg/m ³ 10 ppm	
Silica (61790-53-2)	TWA	3 mg/m ³ 10 mg/m ³	Respirable fraction. Inhalable fraction.
Stoddard solvent (8052-41-3)	TWA	533 mg/m ³	
Xylene (1330-20-7)	STEL	100 ppm 100 ppm 442 mg/m ³	
	TWA	50 ppm 221 mg/m ³	

Bulgaria. OELs. Regulation No 13 of Ministry of Labor & Social Policy, with Ministry of Health, on protection of workers related to exposure to chemical agents at work

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	100 mg/m ³	
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m ³	
CUMENE (98-82-8)	STEL	250 mg/m ³	
	TWA	100 mg/m ³	
Diethylbenzene (25340-17-4)	TWA	10 mg/m ³	
Isopropyl alcohol (67-63-0)	STEL	1.225 mg/m ³	
	TWA	980 mg/m ³	
Morpholine (110-91-8)	TWA	20 mg/m ³	
Oleic acid (112-80-1)	TWA	10 mg/m ³	
Silica (61790-53-2)	TWA	1 mg/m ³	Inhalable fraction.
Xylene (1330-20-7)	STEL	442 mg/m ³	
	TWA	221 mg/m ³	

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value	Form
CUMENE (98-82-8)	TWA	50 ppm 245 mg/m ³	
Isopropyl alcohol (67-63-0)	TWA	980 mg/m ³ 400 ppm	
Silica (61790-53-2)	TWA	2 mg/m ³	
Xylene (1330-20-7)	TWA	100 ppm 435 mg/m ³	

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	Ceiling	250 mg/m ³	
	TWA	100 mg/m ³	
1,3,5-Trimethylbenzene (108-67-8)	Ceiling	250 mg/m ³	
	TWA	100 mg/m ³	
CUMENE (98-82-8)	Ceiling	250 mg/m ³	
	TWA	100 mg/m ³	

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
Isopropyl alcohol (67-63-0)	Ceiling	1.000 mg/m ³	
	TWA	500 mg/m ³	
Morpholine (110-91-8)	Ceiling	70 mg/m ³	
	TWA	35 mg/m ³	
Silica (61790-53-2)	TWA	4 mg/m ³	Dust.
Xylene (1330-20-7)	Ceiling	400 mg/m ³	
	TWA	200 mg/m ³	

Denmark. Exposure Limit Values

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	TLV	20 ppm
		100 mg/m ³
1,3,5-Trimethylbenzene (108-67-8)	TLV	20 ppm
		100 mg/m ³
CUMENE (98-82-8)	TLV	20 ppm
		100 mg/m ³
Isopropyl alcohol (67-63-0)	TLV	490 mg/m ³
		200 ppm
Morpholine (110-91-8)	TLV	10 ppm
		36 mg/m ³
Stoddard solvent (8052-41-3)	TLV	145 mg/m ³
		25 ppm
Xylene (1330-20-7)	TLV	25 ppm
		109 mg/m ³

Estonia. OELs. Occupational Exposure Limit Values for Hazardous Substances (Minister of Social Affairs Regulation No. 57)

Components	Type	Value	Form
1,3,5-Trimethylbenzene (108-67-8)	TWA	20 ppm	
		100 mg/m ³	
CUMENE (98-82-8)	STEL	170 mg/m ³	
		35 ppm	
	TWA	20 ppm	
		100 mg/m ³	
Isopropyl alcohol (67-63-0)	STEL	600 mg/m ³	
		250 ppm	
	TWA	150 ppm	
		350 mg/m ³	
Morpholine (110-91-8)	STEL	30 ppm	
		110 mg/m ³	
	TWA	20 ppm	
		70 mg/m ³	
Silica (61790-53-2)	TWA	2 mg/m ³	Respirable dust.
Stoddard solvent (8052-41-3)	STEL	100 ppm	
		600 mg/m ³	
	TWA	300 mg/m ³	
		50 ppm	
Xylene (1330-20-7)	STEL	100 ppm	
		450 mg/m ³	
	TWA	50 ppm	
		200 mg/m ³	

Finland. Workplace Exposure Limits

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	TWA	20 ppm
		100 mg/m ³
1,3,5-Trimethylbenzene (108-67-8)	TWA	20 ppm
		100 mg/m ³
CUMENE (98-82-8)	STEL	50 ppm
		250 mg/m ³

Finland. Workplace Exposure Limits

Components	Type	Value
	TWA	20 ppm
		100 mg/m3
Isopropyl alcohol (67-63-0)	STEL	250 ppm
		620 mg/m3
	TWA	200 ppm
		500 mg/m3
Morpholine (110-91-8)	STEL	20 ppm
		72 mg/m3
	TWA	10 ppm
		36 mg/m3
Silica (61790-53-2)	TWA	5 mg/m3
Solvent naphtha (petroleum), light aromatic (64742-95-6)	TWA	100 mg/m3
Xylene (1330-20-7)	STEL	110 ppm
		440 mg/m3
	TWA	50 ppm
		220 mg/m3

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	VLE	250 mg/m3
		50 ppm
	VME	100 mg/m3
		20 ppm
1,3,5-Trimethylbenzene (108-67-8)	VLE	50 ppm
		250 mg/m3
	VME	20 ppm
		100 mg/m3
CUMENE (98-82-8)	VLE	250 mg/m3
		50 ppm
	VME	20 ppm
		100 mg/m3
Isopropyl alcohol (67-63-0)	VLE	400 ppm
		980 mg/m3
Morpholine (110-91-8)	VLE	20 ppm
		72 mg/m3
	VME	10 ppm
		36 mg/m3
Xylene (1330-20-7)	VLE	100 ppm
		442 mg/m3
	VME	50 ppm
		221 mg/m3

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	AGW	20 ppm	
		100 mg/m3	
1,3,5-Trimethylbenzene (108-67-8)	AGW	20 ppm	
		100 mg/m3	
CUMENE (98-82-8)	AGW	20 ppm	
		100 mg/m3	
Diethylbenzene (25340-17-4)	AGW	100 mg/m3	
Isopropyl alcohol (67-63-0)	AGW	200 ppm	
		500 mg/m3	
Morpholine (110-91-8)	AGW	10 ppm	
		36 mg/m3	
Silica (61790-53-2)	AGW	4 mg/m3	Inhalable fraction.
Xylene (1330-20-7)	AGW	100 ppm	
		440 mg/m3	

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	TWA	125 mg/m3
		25 ppm
1,3,5-Trimethylbenzene (108-67-8)	TWA	25 ppm
		125 mg/m3
CUMENE (98-82-8)	STEL	75 ppm
		370 mg/m3
	TWA	50 ppm
Isopropyl alcohol (67-63-0)		245 mg/m3
	STEL	500 ppm
	TWA	1.225 mg/m3
Morpholine (110-91-8)		400 ppm
	STEL	980 mg/m3
	TWA	30 ppm
Stoddard solvent (8052-41-3)		105 mg/m3
	STEL	70 mg/m3
	TWA	20 ppm
Xylene (1330-20-7)		720 mg/m3
	STEL	125 ppm
	TWA	100 ppm
		575 mg/m3
	STEL	150 ppm
	TWA	650 mg/m3
		100 ppm
	STEL	435 mg/m3
	TWA	

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	TWA	100 mg/m3
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m3
CUMENE (98-82-8)	STEL	250 mg/m3
	TWA	100 mg/m3
Isopropyl alcohol (67-63-0)	STEL	2.000 mg/m3
	TWA	500 mg/m3
Morpholine (110-91-8)	STEL	72 mg/m3
	TWA	36 mg/m3
Xylene (1330-20-7)	STEL	442 mg/m3
	TWA	221 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	100 mg/m3	
		20 ppm	
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m3	
		20 ppm	
CUMENE (98-82-8)	STEL	250 mg/m3	
		50 ppm	
	TWA	20 ppm	
Isopropyl alcohol (67-63-0)		100 mg/m3	
	TWA	490 mg/m3	
		200 ppm	
Morpholine (110-91-8)	STEL	20 ppm	
		72 mg/m3	
	TWA	10 ppm	
Silica (61790-53-2)	TWA	36 mg/m3	Respirable dust.
	TWA	1,5 mg/m3	
Stoddard solvent (8052-41-3)		145 mg/m3	
		25 ppm	
Xylene (1330-20-7)	STEL	100 ppm	
		442 mg/m3	
	TWA	25 ppm	

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
		109 mg/m3	

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	20 ppm	
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m3 100 mg/m3	
CUMENE (98-82-8)	STEL	20 ppm 250 mg/m3	
	TWA	50 ppm 20 ppm	
Isopropyl alcohol (67-63-0)	STEL	100 mg/m3 400 ppm	
	TWA	200 ppm	
Morpholine (110-91-8)	STEL	20 ppm 105 mg/m3	
	TWA	10 ppm 70 mg/m3	
Silica (61790-53-2)	TWA	6 mg/m3	Total inhalable dust. Respirable dust.
Stoddard solvent (8052-41-3)	TWA	2,4 mg/m3 573 mg/m3	
Xylene (1330-20-7)	STEL	100 ppm 100 ppm	
	TWA	442 mg/m3 50 ppm 221 mg/m3	

Italy. OELs

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	20 ppm	
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m3 20 ppm	
CUMENE (98-82-8)	STEL	100 mg/m3 250 mg/m3	
	TWA	50 ppm 100 mg/m3	
Isopropyl alcohol (67-63-0)	STEL	20 ppm 400 ppm	
	TWA	200 ppm	
Morpholine (110-91-8)	STEL	20 ppm 72 mg/m3	
	TWA	10 ppm 36 mg/m3	
Stoddard solvent (8052-41-3)	TWA	100 ppm	
Xylene (1330-20-7)	STEL	100 ppm 442 mg/m3	
	TWA	50 ppm 221 mg/m3	

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	20 ppm	
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m3 100 mg/m3	
CUMENE (98-82-8)	STEL	20 ppm 250 mg/m3	
	TWA	50 ppm 20 ppm 100 mg/m3	

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
Isopropyl alcohol (67-63-0)	STEL	600 mg/m ³
	TWA	350 mg/m ³
Xylene (1330-20-7)	STEL	100 ppm
		442 mg/m ³
	TWA	50 ppm
		221 mg/m ³

Lithuania. OELs. Occupational Exposure Limit Values for Hazardous Chemical Substance Concentration, General Requirements (No. 645/169)

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	TWA	20 ppm
		100 mg/m ³
1,3,5-Trimethylbenzene (108-67-8)	STEL	30 ppm
		150 mg/m ³
CUMENE (98-82-8)	TWA	20 ppm
		100 mg/m ³
	STEL	50 ppm
		250 mg/m ³
Diethylbenzene (25340-17-4)	TWA	20 ppm
		100 mg/m ³
Isopropyl alcohol (67-63-0)	TWA	10 mg/m ³
	STEL	600 mg/m ³
Morpholine (110-91-8)	TWA	250 ppm
		150 ppm
	STEL	350 mg/m ³
		30 ppm
Xylene (1330-20-7)	TWA	110 mg/m ³
		20 ppm
	STEL	70 mg/m ³
		100 ppm
Xylene (1330-20-7)	TWA	442 mg/m ³
		50 ppm
		221 mg/m ³

Luxembourg. OELs

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	TWA	100 mg/m ³
		20 ppm
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m ³
		20 ppm
CUMENE (98-82-8)	STEL	50 ppm
		250 mg/m ³
	TWA	20 ppm
Morpholine (110-91-8)	TWA	100 mg/m ³
		20 ppm
	STEL	72 mg/m ³
Xylene (1330-20-7)	TWA	36 mg/m ³
		10 ppm
	STEL	100 ppm
		442 mg/m ³
Xylene (1330-20-7)	TWA	221 mg/m ³
		50 ppm

Malta. OELs, Binding and Indicative Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	TWA	20 ppm
		100 mg/m ³
1,3,5-Trimethylbenzene (108-67-8)	TWA	20 ppm
		100 mg/m ³

Malta. OELs, Binding and Indicative Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
CUMENE (98-82-8)	STEL	50 ppm 250 mg/m3
	TWA	100 mg/m3
Xylene (1330-20-7)	STEL	20 ppm 100 ppm 442 mg/m3
		TWA

Netherlands. OELs (binding)

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	STEL	200 mg/m3
	TWA	100 mg/m3
1,3,5-Trimethylbenzene (108-67-8)	STEL	200 mg/m3
	TWA	100 mg/m3
CUMENE (98-82-8)	STEL	250 mg/m3
	TWA	100 mg/m3
Morpholine (110-91-8)	STEL	72 mg/m3
	TWA	36 mg/m3
Xylene (1330-20-7)	STEL	442 mg/m3
	TWA	210 mg/m3

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TLV	20 ppm	
		100 mg/m3	
1,3,5-Trimethylbenzene (108-67-8)	TLV	100 mg/m3	
		20 ppm	
CUMENE (98-82-8)	TLV	125 mg/m3	
		25 ppm	
Isopropyl alcohol (67-63-0)	TLV	100 ppm	
		245 mg/m3	
Morpholine (110-91-8)	TLV	10 ppm	
		36 mg/m3	
Silica (61790-53-2)	TLV	1,5 mg/m3	Respirable dust.
Xylene (1330-20-7)	TLV	25 ppm	
		108 mg/m3	

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	STEL	170 mg/m3	
		TWA	100 mg/m3
1,3,5-Trimethylbenzene (108-67-8)	STEL	170 mg/m3	
		TWA	100 mg/m3
CUMENE (98-82-8)	STEL	250 mg/m3	
		TWA	100 mg/m3
Diethylbenzene (25340-17-4)	STEL	400 mg/m3	
		TWA	100 mg/m3
Isopropyl alcohol (67-63-0)	STEL	1.200 mg/m3	
		TWA	900 mg/m3
Morpholine (110-91-8)	STEL	72 mg/m3	
		TWA	36 mg/m3
Silica (61790-53-2)	TWA	10 mg/m3	Total dust.
		2 mg/m3	Respirable dust.
Stoddard solvent (8052-41-3)	STEL	900 mg/m3	
		TWA	300 mg/m3
Xylene (1330-20-7)	TWA	100 mg/m3	

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	100 mg/m3	
		20 ppm	
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m3	
		20 ppm	
CUMENE (98-82-8)	STEL	250 mg/m3	
		50 ppm	
	TWA	20 ppm	
Isopropyl alcohol (67-63-0)		100 mg/m3	
	STEL	500 ppm	
	TWA	400 ppm	
Morpholine (110-91-8)	TWA	20 ppm	
Silica (61790-53-2)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
Stoddard solvent (8052-41-3)	TWA	100 ppm	
Xylene (1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	50 ppm	
		221 mg/m3	

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	TWA	20 ppm
		100 mg/m3
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m3
		20 ppm
CUMENE (98-82-8)	STEL	30 ppm
		150 mg/m3
	TWA	100 mg/m3
Isopropyl alcohol (67-63-0)		20 ppm
	STEL	500 mg/m3
	TWA	203 ppm
Morpholine (110-91-8)		81 ppm
	STEL	200 mg/m3
	TWA	20 ppm
Stoddard solvent (8052-41-3)		70 mg/m3
	STEL	10 ppm
	TWA	36 mg/m3
Xylene (1330-20-7)		1.000 mg/m3
	STEL	700 mg/m3
	TWA	100 ppm
		442 mg/m3
		50 ppm
		221 mg/m3

Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	Ceiling	200 mg/m3
	TWA	20 ppm
1,3,5-Trimethylbenzene (108-67-8)		100 mg/m3
	Ceiling	200 mg/m3
CUMENE (98-82-8)		20 ppm
		100 mg/m3
	Ceiling	250 mg/m3
Isopropyl alcohol (67-63-0)		100 mg/m3
	TWA	20 ppm
	Ceiling	1.000 mg/m3
Morpholine (110-91-8)		200 ppm
		500 mg/m3
	Ceiling	72 mg/m3

Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

Components	Type	Value
Silica (61790-53-2) Xylene (1330-20-7)	TWA	10 ppm 36 mg/m ³
	TWA	4 mg/m ³
	Ceiling	442 mg/m ³
	TWA	50 ppm 221 mg/m ³

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	20 ppm	
1,3,5-Trimethylbenzene (108-67-8)	TWA	100 mg/m ³	
		100 mg/m ³	
CUMENE (98-82-8)	TWA	20 ppm	
		100 mg/m ³	
Isopropyl alcohol (67-63-0)	TWA	20 ppm	
		500 mg/m ³	
		200 ppm	
Morpholine (110-91-8)	TWA	10 ppm	
		36 mg/m ³	
		4 mg/m ³	Inhalable fraction.
Silica (61790-53-2) Solvent naphtha (petroleum), light aromatic (64742-95-6)	TWA	100 mg/m ³	
	TWA	100 mg/m ³	
Xylene (1330-20-7)	TWA	20 ppm	
		50 ppm	
		221 mg/m ³	

Spain. Occupational Exposure Limits

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	100 mg/m ³	
1,3,5-Trimethylbenzene (108-67-8)	TWA	20 ppm	
		100 mg/m ³	
CUMENE (98-82-8)	STEL	20 ppm	
		50 ppm	
		250 mg/m ³	
Isopropyl alcohol (67-63-0)	TWA	20 ppm	
		100 mg/m ³	
		500 ppm	
		1.250 mg/m ³	
Morpholine (110-91-8)	STEL	998 mg/m ³	
		400 ppm	
		20 ppm	
Silica (61790-53-2)	TWA	72 mg/m ³	
		10 ppm	
		36 mg/m ³	Respirable fraction.
Xylene (1330-20-7)	STEL	3 mg/m ³	Inhalable fraction.
		10 mg/m ³	
Xylene (1330-20-7)	TWA	100 ppm	
		442 mg/m ³	
		50 ppm 221 mg/m ³	

Sweden. Occupational Exposure Limit Values

Components	Type	Value
1,2,4-Trimethyl benzene (95-63-6)	STEL	35 ppm
		170 mg/m ³
1,3,5-Trimethylbenzene (108-67-8)	STEL	25 ppm
		120 mg/m ³
		35 ppm

Sweden. Occupational Exposure Limit Values

Components	Type	Value
CUMENE (98-82-8)	TWA	170 mg/m3 25 ppm
	STEL	120 mg/m3 35 ppm
Isopropyl alcohol (67-63-0)	TWA	170 mg/m3 25 ppm
	STEL	120 mg/m3 250 ppm
Morpholine (110-91-8)	TWA	600 mg/m3 350 mg/m3 150 ppm
	STEL	15 ppm 50 mg/m3
Stoddard solvent (8052-41-3)	TWA	10 ppm 35 mg/m3
	STEL	50 ppm
Xylene (1330-20-7)	TWA	300 mg/m3 150 mg/m3 25 ppm
	STEL	100 ppm 450 mg/m3
	TWA	50 ppm 200 mg/m3

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	STEL	200 mg/m3	
	TWA	40 ppm 20 ppm 100 mg/m3	
1,3,5-Trimethylbenzene (108-67-8)	STEL	40 ppm	
	TWA	200 mg/m3 20 ppm 100 mg/m3	
CUMENE (98-82-8)	STEL	200 ppm 980 mg/m3	
	TWA	245 mg/m3 50 ppm	
Isopropyl alcohol (67-63-0)	STEL	400 ppm 1.000 mg/m3	
	TWA	200 ppm 500 mg/m3	
Morpholine (110-91-8)	STEL	20 ppm 72 mg/m3	
	TWA	10 ppm 36 mg/m3	
Silica (61790-53-2)	TWA	4 mg/m3	Inhalable dust.
Xylene (1330-20-7)	STEL	200 ppm 870 mg/m3	
	TWA	100 ppm 435 mg/m3	

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
1,2,4-Trimethyl benzene (95-63-6)	TWA	125 mg/m3 25 ppm	
	TWA	125 mg/m3	
CUMENE (98-82-8)	STEL	25 ppm 250 mg/m3 50 ppm	
	TWA	25 ppm 125 mg/m3	

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Isopropyl alcohol (67-63-0)	STEL	500 ppm	
	TWA	1.250 mg/m ³ 999 mg/m ³	
Morpholine (110-91-8)	STEL	400 ppm	
	TWA	20 ppm 72 mg/m ³ 10 ppm 36 mg/m ³	
Silica (61790-53-2)	TWA	1,2 mg/m ³	Respirable dust.
Xylene (1330-20-7)	STEL	100 ppm	
	TWA	441 mg/m ³ 50 ppm 220 mg/m ³	

Biological limit values

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065))

Components	Value	Determinant	Specimen	Sampling time
Xylene (1330-20-7)	1.500 mg/g	Acides méthylhippuriqu	Creatinine in urine	Sampling time: End of shift.

UK. EH40 Biological Monitoring Guidance Values (BMGVs)

Components	Value	Determinant	Specimen	Sampling time
Xylene (1330-20-7)	650 mmol/mol	Methyl hippuric acid	Creatinine in urine	Sampling time: End of shift.

Recommended monitoring procedures

Not available.

DNEL

Not available.

PNEC

Not available.

Exposure controls

Appropriate engineering controls

Use explosion-proof equipment.

Individual protection measures, such as personal protective equipment

General information

Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection

Wear approved safety glasses or goggles. Wear face shield if there is risk of splashes.

Skin protection

- Hand protection

Chemical resistant gloves are recommended.

- Other

Wear suitable protective clothing and gloves.

Respiratory protection

Wear a CEN approved respirator, with appropriate cartridge or canister, suitable for airborne concentration levels present.

Thermal hazards

Not applicable.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practices. Provide eyewash station and safety shower.

Environmental exposure controls

Environmental manager must be informed of all major releases.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Clear liquid.

Physical state

Liquid.

Form

Liquid.

Colour

Colourless

Odour

Solvent odor.

Odour threshold

Not available.

pH

Not applicable.

Melting point/freezing point

Not available.

Boiling point, initial boiling point, and boiling range

Not available.

Flash point	> 38 °C (> 100,4 °F) (Estimated)
Auto-ignition temperature	Not applicable.
Flammability (solid, gas)	Not available.
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Oxidising properties	Not applicable.
Explosive properties	Not applicable.
Explosive limit	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Relative density	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Percent volatile	Not available.
Other information	No relevant additional information available.

Section 10: Stability and reactivity

Reactivity	None known.
Chemical stability	Risk of ignition. Stable at normal conditions.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Conditions to avoid	Heat, flames and sparks. Electrostatic Discharge.
Incompatible materials	Strong oxidising agents. Strong acids. Strong bases.
Hazardous decomposition products	None known.

Section 11: Toxicological information

General information Irritant. May cause central nervous system effects.

Information on likely routes of exposure

Ingestion	No harmful effects expected in amounts likely to be ingested by accident.
Inhalation	May cause central nervous system depression.
Skin contact	Causes skin irritation. Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Eye contact	Causes eye irritation.

Symptoms Irritant effects. May cause central nervous system effects.

Information on toxicological effects

Acute toxicity	Causes skin and eye irritation. May cause central nervous system effects.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Not available.
Respiratory sensitisation	Not available.
Skin sensitisation	Not available.
Germ cell mutagenicity	Not assigned.
Carcinogenicity	Not assigned.

IARC Monographs. Overall Evaluation of Carcinogenicity

Morpholine (CAS 110-91-8)	3 Not classifiable as to carcinogenicity to humans.
Silica (CAS 61790-53-2)	3 Not classifiable as to carcinogenicity to humans.
Stoddard solvent (CAS 8052-41-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Not assigned.

Specific target organ toxicity - single exposure	Not assigned.
Specific target organ toxicity - repeated exposure	Not assigned.
Aspiration hazard	Not assigned.
Mixture versus substance information	Not available.
Other information	Not available.

Section 12: Ecological information

Toxicity

Components	Test results
1,2,4-Trimethyl benzene (95-63-6)	LC50 Fathead minnow (Pimephales promelas): 7 - 8 mg/l 96 hours
Persistence and degradability	Not available.
Bioaccumulative potential	Not available.
Mobility	Not available.
Environmental fate - Partition coefficient	Not available.
Mobility in soil	Not available.
Results of PBT and vPvB assessment	Not available.
Other adverse effects	Toxic to aquatic life with long lasting effects.

Section 13: Disposal considerations

Waste treatment methods

Residual waste	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Offer rinsed packaging material to local recycling facilities.
EU waste code	Waste codes should be assigned by the user based on the application for which the product was used. The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Do not incinerate sealed containers. Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container.

Section 14: Transport information

ADR

UN number	UN1268
UN proper shipping name	Petroleum distillates, n.o.s.
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Tunnel restriction code	D/E
Labels required	3
Special precautions for user	Not available.

RID

UN number	UN1268
UN proper shipping name	Petroleum distillates, n.o.s.
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Labels required	3
Special precautions for user	Not available.

ADN

UN number	UN1268
UN proper shipping name	Petroleum distillates
Transport hazard class(es)	3

Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Labels required	3
Special precautions for user	Not available.
IATA	
UN number	UN1268
UN proper shipping name	Petroleum products, n.o.s.
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
ERG Code	3L
Special precautions for user	Not available.

IMDG

UN number	UN1268
UN proper shipping name	Petroleum distillates, n.o.s.
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Marine pollutant	No
EmS No.	F-E, S-E
Special precautions for user	Not available.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	No information available.

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registry (EPER)

Xylene (CAS 1330-20-7)

Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

Not listed.

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Not available.

Chemical safety assessment

Not available.

Section 16: Other information

List of abbreviations Not available.

References Not available.

Information on evaluation method leading to the classification of mixture Not available.

Full text of any statements or R-phrases and H-phrases under Sections 2 to 15

R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.
R20/21 Harmful by inhalation and in contact with skin.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R34 Causes burns.
R36 Irritating to eyes.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.
R37 Irritating to respiratory system.
R38 Irritating to skin.
R45 May cause cancer.
R46 May cause heritable genetic damage.
R51 Toxic to aquatic organisms.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53 May cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.
H225 - Highly flammable liquid and vapour.
H226 - Flammable liquid and vapour.
H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H312 - Harmful in contact with skin.
H314 - Causes severe skin burns and eye damage.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H371 - May cause damage to organs.
H372 - Causes damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

Training information

Not available.

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